

Notice of Allowability

Application No.

10/627,709

Examiner

Eric Coleman

Applicant(s)

HIROSE ET AL.

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 3/28/06.
2. ☒ The allowed claim(s) is/are 1-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Eric Coleman
Primary Examiner

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The combination of features in the independent claims 1 and 16 were not found in the prior art. The prior cited in the last office action comprises information processor apparatus and method where the system decides whether an instruction is none of a plurality of predetermined instructions and if so the instruction is executed by an execution unit and if the instruction is not one of the plurality of instructions structure information is output for determining a circuit structure to execute the instruction and executing the instruction based on the structure information. Also the prior art (Nickolls patent No. 6,959, 378) comprises in a processor that uses of structure information to configure a combinational circuit for processing a predetermined instruction. However these features are not deemed a combinable. Nickolls taught away from executing the programs using additional reconfigurable array or a coprocessor due to synchronization problems (e.g., see col. 2 line 60-col. 3, line 7). Also the Nickolls instructions are predetermined instructions that are executed as within a predetermined plurality of instructions the processor is able to execute (e.g., see col. 4, lines 1-49). Consequently the claimed apparatus and method comprising operations of executing an instruction on an operation unit that is decided to not be one of a predetermined plurality of instructions (that the processor executes when it is decided that the instruction is one of the plurality of instructions), and outputting structure information for determining the circuit structure and executing the instruction on a operating unit that includes a plurality of combinational circuits and has circuit structure

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determined based on the structure information wherein the structure information includes a plurality of parameters each of which determines an operation of each of the combinational circuits was not found in the prior art. Note that Claim 16, does not specify that there were two operating units however the Nickolls system does not perform the claimed operation because in the Nickolls reference does not comprise the feature of deciding that an instruction is not within a plurality of predetermined instructions for executing the operation with combinational circuits that have circuit structure determined based on structure information.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (571) 272-4163. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC

A handwritten signature in black ink, appearing to read "Eric Coleman", with a stylized flourish at the end.

**ERIC COLEMAN
PRIMARY EXAMINER**